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PCT09

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,003

DATE: 10/29/2001

TIME: 11:51:13

Input Set : A:\Nih386-2.app

Output Set: N:\CRF3\10292001\I869003.raw

3 <110> APPLICANT: Scala, Giuseppe  
 4 Chen, Xueni  
 5 Cohen, Oren J.  
 6 Fauci, Anthony  
 7 The Government of the United States of America  
 8 as represented by the Secretary of the  
 9 Department of Health and Human Services  
 11 <120> TITLE OF INVENTION: Novel HIV Related Peptides  
 13 <130> FILE REFERENCE: 015280-386200US  
 15 <140> CURRENT APPLICATION NUMBER: US 09/869,003 *ok*  
 16 <141> CURRENT FILING DATE: 2001-06-22  
 18 <150> PRIOR APPLICATION NUMBER: US 60/115,430  
 19 <151> PRIOR FILING DATE: 1999-01-11  
 21 <150> PRIOR APPLICATION NUMBER: US 60/132,760  
 22 <151> PRIOR FILING DATE: 1999-05-06  
 24 <150> PRIOR APPLICATION NUMBER: WO PCT/US00/00372  
 25 <151> PRIOR FILING DATE: 2000-01-07  
 27 <160> NUMBER OF SEQ ID NOS: 34  
 29 <170> SOFTWARE: PatentIn Ver. 2.1  
 31 <210> SEQ ID NO: 1  
 32 <211> LENGTH: 11  
 33 <212> TYPE: PRT  
 34 <213> ORGANISM: Artificial Sequence ✓  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓  
 38 determinant peptide  
 40 <220> FEATURE:  
 41 <221> NAME/KEY: MOD\_RES  
 42 <222> LOCATION: (1)  
 43 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino  
 44 acid naturally flanking the subsequence at positions ✓  
 45 2-10 in HIV-1  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: MOD\_RES  
 49 <222> LOCATION: (11)  
 50 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino  
 51 acid naturally flanking the subsequence at positions ✓  
 52 2-10 in HIV-1  
 54 <400> SEQUENCE: 1  
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 56 1 5 10  
 59 <210> SEQ ID NO: 2  
 60 <211> LENGTH: 11  
 61 <212> TYPE: PRT  
 62 <213> ORGANISM: Artificial Sequence ✓  
 64 <220> FEATURE:  
 65 <223> OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓

ENTERED

P.5

## RAW SEQUENCE LISTING

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66      determinant peptide
68 <220> FEATURE:
69 <221> NAME/KEY: MOD_RES
70 <222> LOCATION: (1)
71 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino
72      acid naturally flanking the subsequence at positions
73      2-10 in HIV-1
75 <220> FEATURE:
76 <221> NAME/KEY: MOD_RES
77 <222> LOCATION: (11)
78 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino
79      acid naturally flanking the subsequence at positions
80      2-10 in HIV-1
82 <400> SEQUENCE: 2
W--> 83 Xaa Cys Asn Gly Arg Leu Tyr Cys Gly Pro Xaa
      84   1           5           10
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 11
89 <212> TYPE: PRT
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Description of Artificial Sequence:antigenic
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96 <220> FEATURE:
97 <221> NAME/KEY: MOD_RES
98 <222> LOCATION: (1)
99 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino
100      acid naturally flanking the subsequence at positions
101      2-10 in HIV-1
103 <220> FEATURE:
104 <221> NAME/KEY: MOD_RES
105 <222> LOCATION: (11)
106 <223> OTHER INFORMATION: Xaa = any amino acid not identical to the amino
107      acid naturally flanking the subsequence at positions
108      2-10 in HIV-1
110 <400> SEQUENCE: 3
W--> 111 Xaa Gly Thr Lys Leu Val Cys Phe Ala Ala Xaa
      112   1           5           10
115 <210> SEQ ID NO: 4
116 <211> LENGTH: 9
117 <212> TYPE: PRT
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Description of Artificial Sequence:p195 epitope
122      antigenic determinant peptide
124 <400> SEQUENCE: 4
125 Lys Ser Ser Gly Lys Leu Ile Ser Leu
126   1           5
129 <210> SEQ ID NO: 5

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## RAW SEQUENCE LISTING

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Input Set : A:\Nih386-2.app

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130 <211> LENGTH: 9  
131 <212> TYPE: PRT  
132 <213> ORGANISM: Artificial Sequence ✓  
134 <220> FEATURE:  
135 <223> OTHER INFORMATION: Description of Artificial Sequence:p217 epitope ✓  
136 antigenic determinant peptide  
138 <400> SEQUENCE: 5  
139 Cys Asn Gly Arg Leu Tyr Cys Gly Pro  
140 1 5  
143 <210> SEQ ID NO: 6  
144 <211> LENGTH: 9  
145 <212> TYPE: PRT  
146 <213> ORGANISM: Artificial Sequence ✓  
148 <220> FEATURE:  
149 <223> OTHER INFORMATION: Description of Artificial Sequence:p197 epitope ✓  
150 antigenic determinant peptide  
152 <400> SEQUENCE: 6  
153 Gly Thr Lys Leu Val Cys Phe Ala Ala  
154 1 5  
157 <210> SEQ ID NO: 7  
158 <211> LENGTH: 9  
159 <212> TYPE: PRT  
160 <213> ORGANISM: Artificial Sequence ✓  
162 <220> FEATURE:  
163 <223> OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓  
164 determinant peptide  
166 <400> SEQUENCE: 7  
167 Glu Ala Thr Val Val Tyr Pro Ala Pro  
168 1 5  
171 <210> SEQ ID NO: 8  
172 <211> LENGTH: 9  
173 <212> TYPE: PRT  
174 <213> ORGANISM: Artificial Sequence ✓  
176 <220> FEATURE:  
177 <223> OTHER INFORMATION: Description of Artificial Sequence:p54 epitope ✓  
178 with no obvious sequence homology with HIV protein  
179 domains  
181 <400> SEQUENCE: 8  
182 Thr Lys Thr Leu Ile Tyr Gly Gly Ala  
183 1 5  
186 <210> SEQ ID NO: 9  
187 <211> LENGTH: 9  
188 <212> TYPE: PRT  
189 <213> ORGANISM: Artificial Sequence ✓  
191 <220> FEATURE:  
192 <223> OTHER INFORMATION: Description of Artificial Sequence:p163 epitope  
193 with no obvious sequence homology with HIV protein ✓  
194 domains  
196 <400> SEQUENCE: 9

## RAW SEQUENCE LISTING

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197 Lys Arg Ile Val Ile Gly Pro Gln Thr

198 1 5

201 &lt;210&gt; SEQ ID NO: 10

202 &lt;211&gt; LENGTH: 9

203 &lt;212&gt; TYPE: PRT

204 &lt;213&gt; ORGANISM: Artificial Sequence ✓

206 &lt;220&gt; FEATURE:

207 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓

208 determinant peptide

210 &lt;400&gt; SEQUENCE: 10

211 Cys Cys Gly Cys Leu Thr Cys Ser Val

212 1 5

215 &lt;210&gt; SEQ ID NO: 11

216 &lt;211&gt; LENGTH: 10

217 &lt;212&gt; TYPE: PRT ✓

218 &lt;213&gt; ORGANISM: Artificial Sequence ✓

220 &lt;220&gt; FEATURE:

221 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓

222 determinant peptide

224 &lt;400&gt; SEQUENCE: 11

225 Ser Gly Arg Leu Tyr Cys His Glu Ser Trp

226 1 5 10

229 &lt;210&gt; SEQ ID NO: 12

230 &lt;211&gt; LENGTH: 9

231 &lt;212&gt; TYPE: PRT ✓

232 &lt;213&gt; ORGANISM: Artificial Sequence ✓

234 &lt;220&gt; FEATURE:

235 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:antigenic ✓

236 determinant peptide

238 &lt;400&gt; SEQUENCE: 12

239 Phe Ala Leu Ser His Tyr Asp Lys Pro

240 1 5

243 &lt;210&gt; SEQ ID NO: 13

244 &lt;211&gt; LENGTH: 9

245 &lt;212&gt; TYPE: PRT ✓

246 &lt;213&gt; ORGANISM: Artificial Sequence ✓

248 &lt;220&gt; FEATURE:

249 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:p689 epitope

250 with no obvious sequence homology with HIV protein ✓

251 domains

253 &lt;400&gt; SEQUENCE: 13

254 Arg Pro Thr Leu Arg Phe Gln Gly Ala

255 1 5

258 &lt;210&gt; SEQ ID NO: 14

259 &lt;211&gt; LENGTH: 20

260 &lt;212&gt; TYPE: PRT

261 &lt;213&gt; ORGANISM: Artificial Sequence ✓

263 &lt;220&gt; FEATURE:

264 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:p195 analog ✓

## RAW SEQUENCE LISTING

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Input Set : A:\Nih386-2.app

Output Set: N:\CRF3\10292001\I869003.raw

```

265      antigenic determinant peptide
267 <400> SEQUENCE: 14
268 Glu Gly Glu Phe Cys Lys Ser Ser Gly Lys Leu Ile Ser Leu Cys Gly
269   1             5             10             15
271 Asp Pro Ala Lys
272             20
275 <210> SEQ ID NO: 15
276 <211> LENGTH: 20
277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence ✓
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence:p197 analog
282      antigenic determinant peptide ✓
284 <400> SEQUENCE: 15
285 Glu Gly Glu Phe Cys Gln Thr Lys Leu Val Cys Phe Ala Ala Ala Gly
286   1             5             10             15
288 Asp Pro Ala Lys
289             20
292 <210> SEQ ID NO: 16
293 <211> LENGTH: 20
294 <212> TYPE: PRT
295 <213> ORGANISM: Artificial Sequence ✓
297 <220> FEATURE:
298 <223> OTHER INFORMATION: Description of Artificial Sequence:p217 analog
299      antigenic determinant peptide ✓
301 <400> SEQUENCE: 16
302 Glu Gly Glu Phe Cys Cys Asn Gly Arg Leu Tyr Cys Gln Pro Cys Gly
303   1             5             10             15
305 Asp Pro Ala Lys
306             20
309 <210> SEQ ID NO: 17
310 <211> LENGTH: 20
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial Sequence ✓
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence:p287 analog
316      antigenic determinant peptide ✓
318 <400> SEQUENCE: 17
319 Glu Gly Glu Phe Cys Cys Ala Gly Gln Leu Thr Cys Ser Val Cys Gly
320   1             5             10             15
322 Asp Pro Ala Lys
323             20
326 <210> SEQ ID NO: 18
327 <211> LENGTH: 12
328 <212> TYPE: PRT
329 <213> ORGANISM: Artificial Sequence ✓
331 <220> FEATURE:
332 <223> OTHER INFORMATION: Description of Artificial Sequence:p335 analog
333      antigenic determinant peptide ✓

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/869,003

DATE: 10/29/2001

TIME: 11:51:14

Input Set : A:\Nih386-2.app

Output Set: N:\CRF3\10292001\I869003.raw

L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33